

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

**Paul Bacchi and Paul S. Filipski**

Application No. 10/649,116

Filed: August 26, 2003

For: **SPECIMEN SENSING AND EDGE  
GRIPPING END EFFECTOR**

Group Art Unit:

Examiner:

Date: November 21, 2003



Confirmation No. 5500

I HEREBY CERTIFY THAT THIS CORRESPONDENCE  
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Connie English  
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TRANSMITTAL LETTER

TO THE COMMISSIONER FOR PATENTS:


Enclosed for filing in the above-referenced application are the following:

- ☒ Information Disclosure Statement
- ☒ Form PTO-1449
- ☒ Copies of cited references (five enclosed)
- ☒ Return Receipt postcard

The Commissioner is hereby authorized to charge any additional fees which may be required in connection with filing of these papers, or credit overpayment, to Account No. 19-4455. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

**Paul Bacchi and Paul S. Filipski**

By   
Paul S. Angello  
Registration No. 30,991

STOEL RIVES LLP  
900 SW Fifth Avenue, Suite 2600  
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Attorney Docket No.: 40146/32:6

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In re application of

**Paul Bacchi and Paul S. Filipski**

Application No. 10/649,116

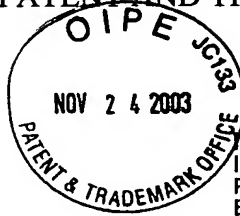
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INFORMATION DISCLOSURE STATEMENT

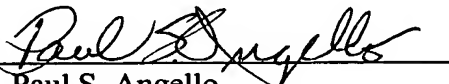
TO THE COMMISSIONER FOR PATENTS:

1. Pursuant to their duty of disclosure, applicants present for the Examiner's consideration the documents listed on the accompanying Form PTO-1449.
  - ☒ Copies of the documents AH and AL listed on Sheet 1 of 4, document AP listed on Sheet 2 of 4, and documents AN and AP on Sheet 3 of 4 are enclosed.
  - ☒ Copies of the remaining documents listed are not enclosed because (1) they are already of record in U.S. Patent Application No. 10/223,075, filed August 15, 2002 (now U.S. Patent No. 6,618,645); U.S. Patent Application No. 09/920,353, filed August 1, 2001 (now U.S. Patent No. 6,438,460); U.S. Patent Application No. 09/312,343, filed May 14, 1999 (now U.S. Patent No. 6,275,748); and U.S. Patent Application No. 09/204,747, filed December 2, 1998 (now U.S. Patent No. 6,256,555), on each of which this application relies for an earlier filing date under 35 U.S.C. § 120, and (2) any information disclosure statement filed in the prosecution of any of the above-identified patent applications, complies with 37 C.F.R. §§ 1.98(a) and (c). (37 C.F.R. § 1.98(d).) (Applicants note that it is permissible to omit copies of listed U.S. patent documents because this application was filed after June 30, 2003 and is, therefore, subject to image file wrapper processing.)
2. ☐ The Examiner's attention is directed to the enclosed copy of copending U.S. Patent Application No. \_\_\_\_\_, filed \_\_\_\_\_, for \_\_\_\_\_, which is cited in this application.
3. This information disclosure statement is being submitted (check box a., b., or c.):
  - a. ☒ Within three months of the filing date of a national application or entry of the national stage in an international application; or before the mailing of a first Office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. (No statement under 37 CFR 1.97(e) is required.); or

- b. ☐ After the period set forth in paragraph 3a, but before the mailing date of either a final action, a notice of allowance, or an action that otherwise closes prosecution in the application. (Check box i. or ii.)
- i. ☐ A \$180.00 information disclosure statement submission fee set forth in 37 CFR 1.17(p) is enclosed, or
- ii. ☐ A statement specified by 37 CFR 1.97(e) is set forth below; or
- c. ☐ After the mailing date of a final action or notice of allowance and on or before payment of the issue fee. A statement specified by 37 CFR 1.97(e) is set forth below. Enclosed is a \$180.00 information disclosure statement processing fee set forth in 37 CFR 1.17(p).
4. If a statement specified by 37 CFR 1.97(e) is required, the attorney or agent signing below hereby states that:
- ☐ each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement; or
- ☐ no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement.
5. ☐ A concise explanation of the relevance of each document not in the English language and/or selected documents in the English language is set forth below.

Respectfully submitted,

**Paul Bacchi and Paul S. Filipski**

By   
Paul S. Angello  
Registration No. 30,991

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Portland, OR 97204-1268  
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Facsimile: (503) 220-2480  
Attorney Docket No. 40146/32:6

FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
40146/32:6APPLICATION NO.  
10/649,116INFORMATION DISCLOSURE CITATION  
(Uses several sheets if necessary)APPLICANT  
Paul Bacchi and Paul S. FilipskiFILING DATE  
August 26, 2003

GROUP

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	6	6	1	8	6	4	5	09/09/03	Bacchi et al.	700	254	08/15/02
	AB	6	4	5	3	2	1	4	09/17/02	Bacchi et al.	700	245	08/02/01
	AC	6	4	3	8	4	6	0	08/20/02	Bacchi et al.	700	245	08/01/01
	AD	6	2	7	5	7	4	8	08/14/01	Bacchi et al.	700	245	05/14/99
	AE	6	2	5	6	5	5	5	07/03/01	Bacchi et al.	700	245	12/02/98
	AF	6	1	6	0	2	6	5	12/12/00	Bacchi et al.	250	559.29	08/27/98
	AG	6	1	1	3	1	6	5	09/05/00	Wen et al.	294	1.1	10/02/98
	AH	6	1	0	9	6	7	7	08/29/00	Anthony	294	103.1	05/28/98
	AI	6	1	0	5	4	5	4	08/22/00	Bacchi et al.	074	490.03	06/16/98
	AJ	6	0	9	8	4	8	4	08/08/00	Bacchi et al.	074	490.03	12/02/98
	AK	5	9	8	8	9	7	1	11/23/99	Fossey et al.	414	416	07/09/97

## FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	AL	0	0	3	3	3	5	9	08.06.00	WO	H01L	21/00	X	
	AM	0	0	0	3	4	1	8	20.01.00	WO	H01L	21/00	X	
	AN	0	8	2	0	0	9	1	21.01.98	Europe	H01L	21/00	X	
	AO	9	7	4	5	8	6	1	04.12.97	WO	H01L	21/00	X	
	AP	9	7	4	4	8	1	6	27.11.97	WO	H01L	21/00	X	

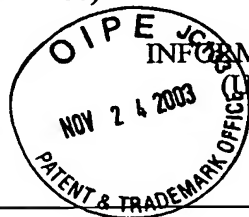
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

AR	Motion Engineering, Inc., Advanced motion control semiconductor front-end applications, 1999, Internet, pp. 1-12.
AS	Srinivasan, Modeling and performance analysis of cluster tools using petri nets, 1998, IEEE, pp. 394-403.
AT	Song et al., Intelligent rehabilitation robotic system for the disabled and the elderly, 1998, IEEE, pp. 2682-2685.

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformation with MPEP609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	AA	5	9	8	0	1	8	8	11/09/99	Ko et al.	414	417	11/28/97
	AB	5	9	4	4	4	7	6	08/31/99	Bacchi et al.	414	783	03/26/97
	AC	5	8	7	0	4	8	8	02/09/99	Rush et al.	382	151	05/07/96
	AD	5	8	1	0	9	3	5	09/22/98	Lee et al.	118	728	11/29/95
	AE	5	7	6	5	4	4	4	06/16/98	Bacchi et al.	074	490.03	
	AF	5	7	4	1	1	1	3	04/21/98	Bacchi et al.	414	744.5	
	AG	5	6	9	7	7	5	9	12/16/97	Bacchi et al.	414	786	
	AH	5	6	6	9	6	4	4	09/23/97	Kaihotsu et al.	294	1.1	
	AI	5	5	3	8	3	8	5	07/23/96	Bacchi et al.	414	403	
	AJ	5	5	1	3	9	4	8	05/07/96	Bacchi et al.	414	783	
	AK	5	5	1	1	9	3	4	04/30/96	Bacchi et al.	414	783	

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EXAMINER INITIAL		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	AL	8	2	2	7	9	3	1	03.09.96	Japan	H01L	21/68	Machine	
	AM	0	6	6	9	6	4	2	30.08.95	Europe	H01L	21/00	X	
	AN	7	2	0	1	9	4	7	04.08.95	Japan	21	68	X	
	AO	7	1	5	3	8	1	8	16.06.95	Japan	21	68	X	
	AP	7	0	3	7	9	6	0	07.02.95	Japan	H01L	21/68	Abstract	

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	Arai et al., Micro endeffector with micro pyramids and integrated piezoresistive force sensor, 1996, IEEE, pp. 842-849.
	AS	Hesselroth et al., Neural network control of a pneumatic robot arm, 1994, IEEE, pp. 28-38.
	AT	Brett et al., A tactile sensing technique for automatic gripping of compact shaped non-rigid materials, 1994, IEEE, pp. 5/1-5/5.

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	AA	5	4	5	6	5	6	1	10/10/95	Poduje et al.	414	225	
	AB	5	3	8	7	0	6	7	02/07/95	Grunes	414	217	
	AC	5	3	8	2	8	0	6	01/17/95	Bacchi et al.	250	561	
	AD	5	3	3	2	3	5	2	07/26/94	Poduje et al.	414	225	
	AE	5	2	3	8	3	5	4	08/24/93	Volovich	414	779	
	AF	5	1	3	3	6	3	5	07/28/92	Malin et al.	414	744.8	
	AG	5	0	9	2	7	2	9	03/03/92	Yamazaki et al.	414	225	
	AH	4	9	3	8	6	0	0	07/03/00	Into	365	401	
	AI	4	9	0	0	2	1	4	02/13/90	Ben	414	416	
	AJ	4	7	1	7	1	9	0	01/05/88	Witherspoon	294	99.2	
	AK	4	6	3	9	0	2	8	01/27/87	Olson	294	34	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
	AL	7	0	2	2	5	0	2	24.01.95	Japan	21	68	Machine	
	AM	9	4	1	9	8	2	1	01.09.94	WO	H01L	21/00	Abstract	
	AN	6	1	5	5	3	6	6	03.06.94	Japan	B25J	19/00	Machine	
	AO	4	3	4	3	4	4	8	30.11.92	Japan	21	68	Machine	
	AP	4	2	7	7	6	4	7	02.10.92	Japan	H01L	21/68	Abstract	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	Mahalingam et al., Special challenges of robotic gripping in space, 1988, IEEE, pp. 581-586.
	AS	
	AT	

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	AA	4	6	6	2	8	1	1	05/05/87	Hayden	414	433	
	AB	4	4	5	2	4	8	0	06/05/84	Maier et al.	294	104	
	AC	4	4	1	0	2	0	9	10/18/83	Trapani	294	34	
	AD	4	0	2	4	9	4	4	05/24/97	Adams et al.	198	394	
	AE	2	3	6	7	9	9	1	01/23/45	Bailey	294	34	
	AF												
	AG												
	AH												
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	AK												

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